

Chernobyl nuclear power plant in the former Soviet Union, resulting in the worst release of radioactive Water Act sets state water quality standards. 24 nations commit to phase out production of CFCs. Yucca

# INABIE COMMINIES

Environmental progress is ultimately measured at the community level. Nationally, EPA's laws, regulations and technical criteria give us authority and a scientific basis to make good decisions. But at their core, most environmental issues are about safety and quality of life at home and in the workplace. Livability can be measured in many ways: the quality of air we breathe, the wholesomeness of our food, the sustainability of local economies and even the length of our commutes.

Over the past decades, EPA has implemented hugely successful campaigns to reduce environmental hazards, including the elimination of lead paint and gasoline in the 1970s, the removal of asbestos materials in the late 1980s and radon gas mitigation in the early 1990s. EPA continues to address potential risks in our homes, schools and workplaces.

## Asthma and Children's Health

Asthma remains a persistent problem in the U.S. The number of children afflicted has doubled in the past 10 years, currently affecting almost five million nationwide. Nationally, the asthma rate among children ages 5-14 rose 74% between 1980-94. Asthma can be triggered by irritants and allergens such as smoke, dust, molds, mites and pet dander.

Asthma is a big concern in heavily populated areas. In Denver County alone, 8,210 cases of childhood asthma

were reported in 1998 -- along with over 19,000 adult cases. Low-income and minority children are afflicted at much higher rates. To minimize asthma triggers, EPA promotes the use of common-sense, low-cost solutions for clearing the air in homes and schools.

Since children are most vulnerable to pollution of all types, EPA has made a major commitment to children's health. Since 1995, EPA has considered health risks to infants and children in all risk characterizations and public health standards set for the United States. This includes air and drinking water standards and food quality protection. In Region 8, EPA's Indoor Air Quality Tools for Schools program has helped schools provide healthy environments for students and staff. Region 8 is also working with the Southern Ute and the Rocky Boys tribes to identify hazards to children on their reservations.

### Radon

Radon, a naturally occurring radioactive gas, is the second leading cause of lung cancer in the U.S. It is odorless, tasteless and colorless, and found naturally in soils throughout the world. Many areas in Region 8 have the potential for high indoor radon. EPA's radon program focuses on risk reduction through education and outreach, training of radon professionals, technical assistance to the general public, and support of state and tribal radon programs.

materials in history. Thousands die, 450,000 are evacuated within a 30-square-kilometer area. 1987 Clean Mountain, Nevada is selected as the disposal site for the nation's radioactive waste. 1988 Congress bans ocean

### Lead

Lead is a naturally occurring substance that is toxic when ingested or inhaled. Lead is most hazardous to children under six years of age. Health effects include reduced intelligence and attention span, reading/learning disabilities and behavioral problems. In adults, lead exposure can damage reproductive systems, and contribute to nerve disorders, high blood pressure and other problems.

EPA's ban of lead-based gasolines in the 1970s has greatly reduced lead exposure. Nationally, blood lead levels have dropped 85% since 1980. Nevertheless, lead contamination remains a localized concern in parts of Region 8. Indoor exposure is most often through particles and dust linked to deteriorating lead-based paint. Exposure can also be traced to contaminated soil and water from mine wastes.

EPA provides grant money to states and tribes for public education and testing activities. The agency also certifies training providers and programs to perform inspections, risk assessment and abatement work, and requires public disclosure about lead hazards by builders, realtors, landlords and renovators. EPA is also beginning to focus on outdoor sources of lead exposure -- such as paints used on playgrounds and fences.

### Asbestos

Asbestos fibers, widely used in building materials, can cause serious lung diseases including asbestosis, lung cancer, mesothelioma and cancers of the digestive tract. Asbestos-related diseases have a long latency period and symptoms may not appear until 20-40 years after exposure. The main focus of EPA Region 8's asbestos work is in schools and public buildings. Region 8 provides assistance and oversight for asbestos training, accreditation and certification programs for five of the Region 8 states. EPA directly implements this program in Wyoming and on tribal lands.

# Addressing Growth and Urban Sprawl

As in much of the West, many parts of Region 8 are experiencing tremendous population growth. While much of this growth is concentrated along Colorado's Front Range and Utah's Wasatch Front, rural areas across the Region are also being challenged by growth and development pressures. According to the Colorado Department of Agriculture, over 100,000 acres of agricultural lands are being converted to urban development each year in Colorado alone.

While land-use and growthmanagement activities are the responsibility of state, tribal and local authorities, EPA is uniquely positioned to encourage growthmanagement measures that take environmental impacts into consideration. EPA Region 8 uses existing authorities under statutes such as the Clean Air Act, the Clean Water Act and the National Environmental Policy Act to help minimize the impacts of development activities. Region 8 also focuses on supporting state, tribal and local efforts. Specific activities include improving communications

and providing technical expertise and resources to manage growth issues such as wastewater disposal, drinking water, water quantity, waste disposal, transportation and air quality, storm water runoff, and wetlands and habitat loss. EPA also provides funding and support for specific projects through programs such as Sustainable Development Challenge Grants.

# **Enhancing Right-to-Know**

EPA has promoted and expanded the public's right-to-know about their environment. The Emergency Planning and Community Right-to-Know Act (EPCRA) of 1986 calls for certain manufacturing businesses to submit annual reports on the amounts of toxic chemicals their facilities release. Through EPCRA, the Toxics Release Inventory (TRI) national database was created, which identifies facilities, chemicals manufactured and used, and accidental and routine releases. The TRI has increased awareness and enabled communities to be active participants in negotiations with industry. Over time, the amount of information available about toxics has increased considerably. The list of toxic chemicals in the TRI has nearly doubled since 1993.

### **Rrownfields**

A brownfield is a site with actual or perceived contamination that has potential for redevelopment or reuse. There are hundreds of these sites in the Region, from abandoned factories and shuttered gas stations, to aging rail yards. Cleaning up and reusing these areas often helps to

dumping of sewage sludge and industrial waste. EPA and the Surgeon General urge every homeowner to test Alaska's Prince William Sound. EPA announces TRI database which tells the public which toxic chemicals preserve greenspace which would otherwise be used for development.

EPA's Brownfields Redevelopment Initiative empowers states, communities and other stakeholders to assess, clean up and reuse brownfields. Since 1995, EPA has provided up to \$200,000 in seed money to over 300 states, tribes, local governments and nonprofit groups across the nation to expedite cleanup or assessment of local sites. Region 8 efforts include funding pilot projects and research, clarifying liability issues, entering into partnerships, conducting outreach, developing job training programs and addressing environmental justice concerns.

As of 1999, Region 8 has provided funding and technical support for 17 Brownfields Redevelopment Pilot projects. These pilots will test redevelopment models, remove regulatory barriers while ensuring protection, and strengthen site assessment, environmental cleanup and redevelopment efforts. Salt Lake City's 650-acre Gateway District is one example. The area is a former industrial center that is severely



New development near Denver, CO. The impacts of growth and development pose potentially significant environmental challenges for both large and small communities.

impacted by abandoned sites and changing transportation networks. Efforts are underway to clean up and redevelop the District to expand mixed-use development and provide support facilities for the 2002 Winter Olympics.

### **Tribal Communities**

Region 8 includes 26 federally recognized Indian reservations and 27 tribes. Indian Country encompasses 15.1 million acres, approximately 4.4% of the total land area in Region 8.

One of EPA Region 8's highest priorities is to protect public health and the environment in Indian Country. Many tribal communities are at the same place rural areas of many states were 25 years ago. Many lack basic drinking water and wastewater systems, and the ability to safely manage or dispose of solid and hazardous waste. In addition, many communities on tribal lands face challenging environmental issues including leaking underground storage tanks, access to clean and safe drinking water, and groundwater contamination from animal feedlots.

Most Region 8 tribes are still developing the ability to assume full responsibility for running environmental programs. Because Indian Reservations are sovereign nations -- autonomous and independent of state authority -- EPA has what is called "trust responsibility" to directly manage environmental programs in Indian Country. These responsibilities include issuing permits, conducting inspections, taking enforcement



Gateway Showcase Project, Salt Lake City. The abandoned paint manufacturing building shown above will be redeveloped into 50 housing units and retail shops in 2000. Expanding this type of mixed-use development will be a critical step in the revitalization of the Gateway District.

actions, and providing technical and compliance assistance. In 1999, EPA Region 8 conducted over 600 inspections in Indian Country.

EPA's long-term goal is to support each tribe in developing the capacity and expertise to run its own environmental programs. The Tribal Assistance Program also provides general and financial assistance, helps with assessing environmental conditions, and develops environmental management agreements with individual tribes.



Water quality assessment work with the Flandreau Santee Sioux Tribe in South Dakota. Providing support for environmental program development on tribal lands is a big priority in Region 8.

for radon gas, a cause of lung cancer. 1989 Exxon Valdez spills nearly 11 million gallons of crude oil into are being released from specific industrial facilities. New York State declares parts of Love Canal area